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Alberta INDUSTRIAL NEWSLETTER



- ELECTRONICS SYSTEMS
- GLASS BLOWERS
- NEW BUILDING TILES
- TOWN OF BASSANO

DEPARTMENT OF INDUSTRY AND DEVELOPMENT / Hon. A. R. PATRICK, Minister
INDUSTRIAL DEVELOPMENT BRANCH / R. MARTLAND, Director

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EDMONTON, ALBERTA, CANADA

FEBRUARY, 1961

AGRICULTURAL CHEMICAL FIRM EXPANDS FACILITIES

One of Western Canada's major agricultural chemical producers, Allied Chemical Services Ltd., of Calgary, recently completed a \$75,000 expansion program, bringing plant and equipment investment to more than \$250,000. The latest expansion included equipment for the manufacture of 2, 4-D and MCP amine for the first time in Alberta.

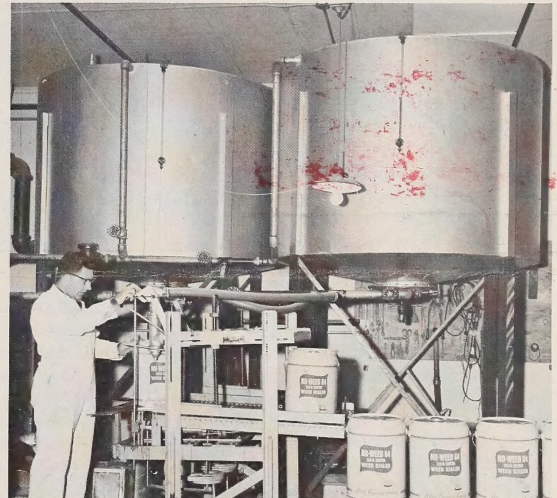
One of the largest formulators of agricultural chemicals in Canada, Allied presently markets a full line of "No-Weed" brand herbicides; an increasing line of seed dressings under the A.C.S. brand, and an increasing number of insecticides also under the A.C.S. brand.

The company also produces a wide range of products for many companies in the agricultural chemical distributing field.

Basically, the company manufactures and formulates esters of 2, 4-D and MCP, herbicidal dusts, amines of 2, 4-D and MCP, and insecticides such as DDT, endrin, aldrin, dieldrin, etc.

Like many other Alberta manufacturing firms, Allied Chemical attempts to purchase as many raw materials as is possible in the province, or Canada. Solvents are purchased locally, basic herbicide liquids are purchased in eastern Canada while basic ingredients for insecticides are imported. Acids and esters of 2, 4-D and MCP will be purchased from the Edmonton plant of Naughtuck Chemicals when it is in operation next year.

In full operation, the plant can turn out 60 tons



Allied Chemical Service's line of "No-Weed" herbicides are formulated in large tanks. An employee is shown filling containers with 2, 4-D ester.

of chemicals per day. Value of annual production is approximately \$800,000 to \$1,000,000. Payroll contribution to the economy of Alberta averages approximately \$46,000 annually.

Allied Chemical Services Ltd. is located at 5507 - 1 St. S.E. in Calgary.

ALBERTANS DESIGN, BUILD ELECTRONICS SYSTEMS

An Alberta firm that has experienced almost phenomenal growth in its ten years of existence is Canadian Electronics Limited of Edmonton. Engineers and distributors of a vast array of electronic equipment, the company has seen its sales volume soar from \$80,000 in the first year of business to more than \$2,000,000. The staff has grown correspondingly from three original partners to a total of 55 persons.

Canadian Electronics was one of the first firms in western Canada with facilities to engineer, furnish, install and service custom electronic systems of all types.

The management group behind Canadian Electronics' meteoric rise, includes General Manager Bill Cowley; Guy Packford, sales manager of the Components Division, and Tom Hall, manager of the Special Products and Engineering Divisions. The combined experience of the trio brought to Canadian Electronics a sound administrative background in electrical engineering, corporation sales, and industrial systems design.

Armed with \$10,000 capital and operating from quarters of 500 square feet, the three partners began calling on prospective customers. Orders were received but not easily filled as supplies were not readily available and some large manufacturers granted the fledgling company only a courtesy discount. In some cases parts were purchased from competitors and sold at the same price, just to service orders.

The sales volume of the new firm maintained a steady rise, however, and in 1953, Canadian Electronics moved to a new location with 3,500 square feet of floor space. Sales continued to rise, as did the need for additional area. In 1956 the company erected a new \$400,000 structure providing 16,000 square feet of space. The plant is located at the corner of 109 Street and 107 Avenue in Edmonton.

Recognizing that customer service is an important factor in maintaining sales volume, the company in 1958 opened a branch office in Calgary, and last fall opened auxiliary offices in Lethbridge and Medicine Hat.

Tremendous advances in the use of electronics in industry has aided the expansion of the company. When the company was organized there was but one VHF (very high frequency) radio system in the province. In the last decade the company has engineered and sold more than 3,500 stations; many to the fast growing petroleum and gas industry. Because one VHF station has some 1,000 components, the need for fast servicing and supply of replacement parts, contributed to the rapid growth of the Company's component division. This demand for services requires a complete and diverse stock of electronic components. Present stocks total \$350,000 in value.



A completely mobile communications system was built by Canadian Electronics for the Alberta Emergency Measures Organization. A large van and one of four satellite vehicles is shown here. The main control van houses telephone and teletype facilities in addition to compact radio equipment linking the four smaller units. The system is capable of forming an effective communications network over any area of disaster.

The radio networks sold by CEL alone account for an investment in Alberta of more than \$4,000,000.

Much of the electronic equipment used in automated gas refineries is built by Canadian Electronics. These "telemetry" devices enable a single operator to control flow line pressure, rate of flow, read well head temperature and gather other data from wells located up to 30 or more miles away.

The firm has erected several community television distribution systems in areas out of range for regular reception. Towers up to 400 feet in height have special antennae to pick up the signal which is then transmitted by cable to subscribers' homes.

Sound systems for schools, retail stores, churches, auditoria, etc. are also built, and taped music supplied.

New development on which the firm's electronics researchers are working include a doctors' presence register for use in hospitals and an audio technique whereby dentistry patients do not require any anaesthetic but wear headphones over which is played a special music and noise combination.

Engineers are presently working on a system which will pipe music into the cell blocks of Alberta provincial jails.

Canadian Electronics has an affiliate company known as Edmonton Industrial Electronics which specializes in technical service such as meter and instrument repairs, calibration and other similar work. The affiliate is also responsible for all installations of electronic instruments sold by the parent company.

Employees of the two concerns total 55 with an annual payroll of \$290,000.

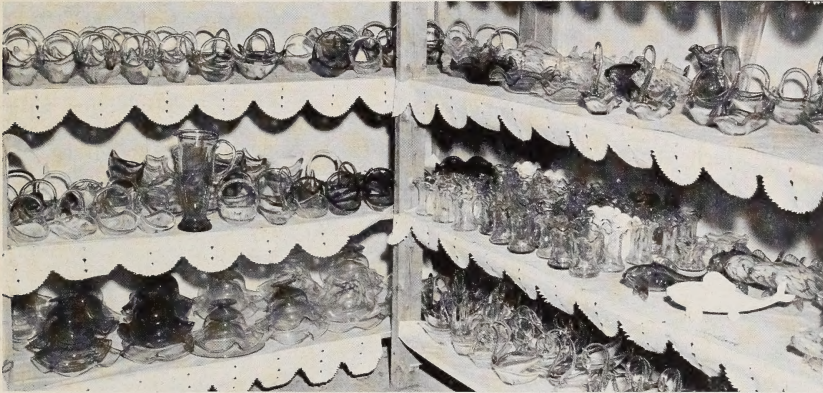
Master Glass Blowers Produce Variety Ornamental Glassware

Fine ornamental glassware manufactured in Calgary by the Continental Glass Manufacturing Company has been placed on the Canadian market. The new concern is operated by Joseph Takacs, and his brother Louis, both of whom came to Canada from their native Hungary three and one-half years ago.

The firm's products include such items as vases, ash trays, swans, bowls, paper weights, candy baskets and dishes, and water pitchers. Some are intricate in design, others are more simple. Cut glass can be clear or color tinted in several hues.

The Takacs brothers were both master glassblowers in Hungary. Joseph has 32 years experience in the field while Louis can refer to 11 years of work in a large Hungarian government-owned plant. After their arrival in Canada, they were employed by the Alta-Glass firm at Medicine Hat.

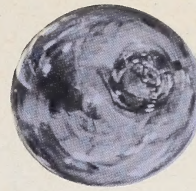
The Continental Glass Manufacturing Company was formed early in 1960 and operations commenced May 1 in rented 2,000 square feet premises at 520-35



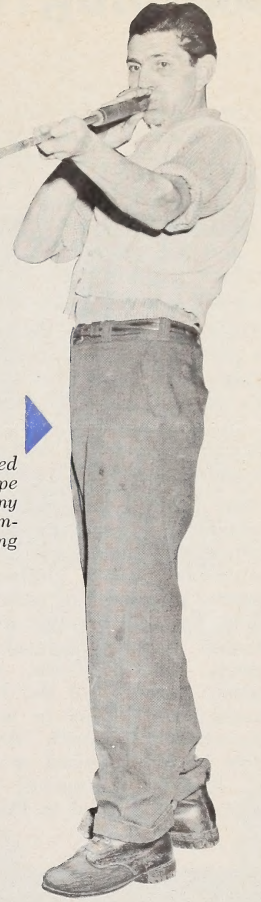
Avenue N.E., Calgary. Equipment costing more than \$5,000, includes two melting furnaces and melting pots, a re-heating furnace, two coolers, two grinding machine, a crackoff and glazing machine, blow pipes, and other tools.

About 200 pounds of the major raw material, silica sand, will be used daily in turning out approximately \$250 worth of glassware. The sand, along with other essential materials is purchased almost exclusively in Alberta. Other requirements are soda ash, potash carbonate, borax, nitrate of soda, potash nitrate, arsenic, and metal oxides.

In the production of glass, silica sand is mixed with the other materials and placed into a melting pot of one of the gas-fired, hand-built furnaces. Air is forced into the gas to bring the temperature to a desired 2500 degrees F. After a 12-hour boiling period, the molten glass is taken out of the pot by blow-pipe and blown into wooden moulds.



A bit of molten glass twirled on the end of a long blowpipe can be blown to almost any size. Here, Joseph Takacs demonstrates the art by creating a glass ball.



Glassware in many designs and colors is displayed at the Calgary plant of the Continental Glass Manufacturing Company.

The blown item, now at a temperature of approximately 800 degrees F. is placed into a cooling oven. After another 12-hour period during which the temperature is gradually reduced, the glassware is removed; the base ground smooth; and items packed and stored for shipment. Fancy designs as the "corn-flower" are cut into the glass at the same time the base is being ground.

Sales are handled by retail outlets in Ontario, Manitoba, Saskatchewan and Alberta.

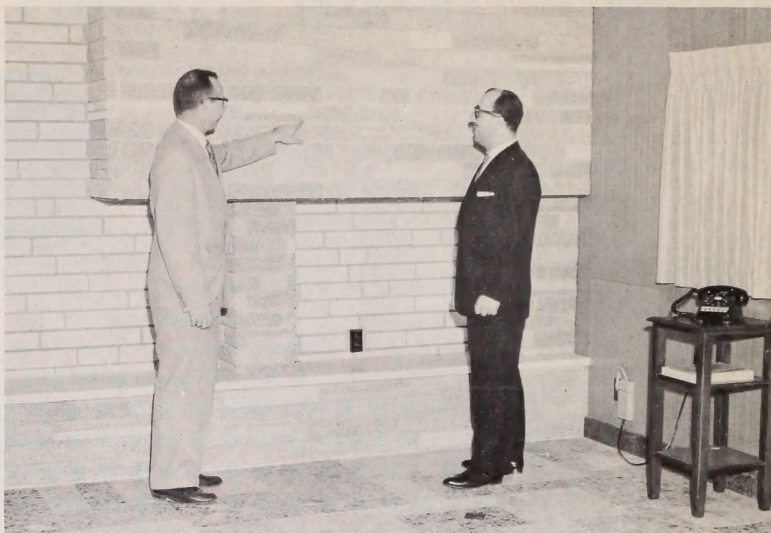
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Building Tiles of Recreated Stone Intro

Attractive building tiles new to North America are being produced in Edmonton by the Marblux Corporation of Canada, Ltd., a locally-owned firm. The feature product, with the trade name of "Marblux" is recreated stone, composed of crushed marble, quartz or granite on a concrete backing.

Different styles of the material are produced for such uses as stone facing tiles, sidewalk or street tiles, patio tiles, split face stone for such decorative uses as fireplaces, ranch stone, and several specialized types of flooring tiles.

The Marblux Corporation was formed two years ago by three brothers, Philip, Louis and Hy Lieberman. Alfred Hoffman, an engineer employed by a firm with whom the Liebermans were associated, informed them about the process. Mr. Hoffman, now a partner, and one of the brothers travelled to Europe to negotiate acquisition of North American rights to the required machinery and formula. Successful in the quest, they returned to Edmonton



Alfred Hoffman, engineer and designer at Marblux, and company President Philip Lieberman, examine the different color contrasts of the firm's split-face tile, designed for such uses as outdoor patios, or rumpus room feature walls.

and erected a 17,000-square foot plant located at 14360-125 Avenue, which opened last November. Nineteen persons are employed although the firm expects soon to

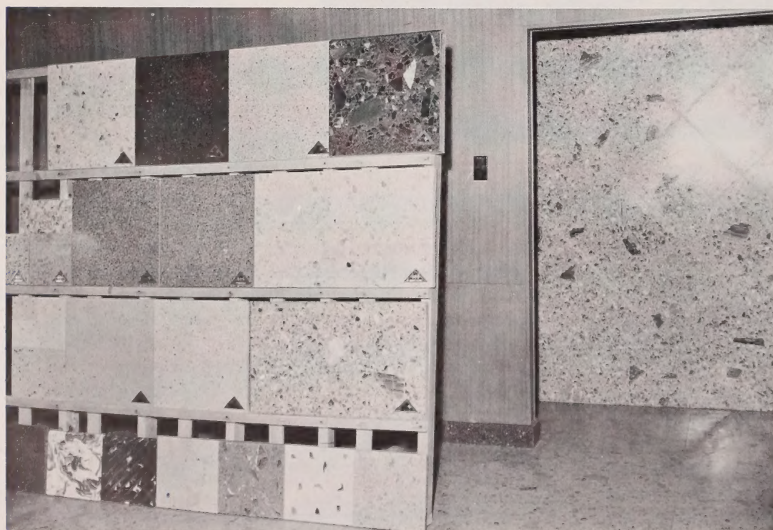
go on a 24-hour production with a total of 45 employees. Expansion is provided for in the design of the building which is situated on trackage and a five acre lot.

The plant is geared to produce 1¼ million square feet of Marblux per year.

A specially prepared mixture of cement, sand, crushed stone as well as marble, granite or quartz and chemicals is fed into a large machine.

Several of the ingredients are mixed, then fed into lasts or dies. Tiles ranging in size from 12 inches square with a thickness of 7/8 of an inch, to tiles 24 inches square with thickness up to 3 inches can be compressed.

The face of the machine-made stone can be left rough, or ground flat and polished so that cross sections of the crushed stone are revealed. A special process prevents color fading, and satin or high gloss mirror finishes can be effected.



Recreated granite and marble tile patterns are displayed here. Note the marble tile feature wall at right.

Produced by Marblux Corporation of Canada

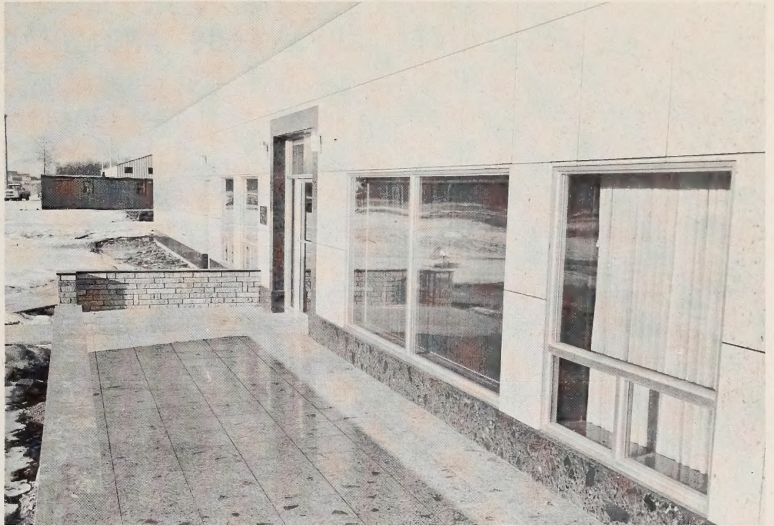
Split face stone is also produced by compressing crushed stone. The tile is split in a special operation for required sizes.

The finished product has a compression strength up to 9,000 pounds per square inch depending on size and intended use. It is dense and reported to be weather resistant and color-fast. There is an unlimited range of colors, styles and designs.

The company is also equipped to manufacture pre-cast stairs, stringers, facing panels, etc., up to 12 feet in length and in any thickness. An almost dry-mix formula and high frequency vibration guns are used in the process.

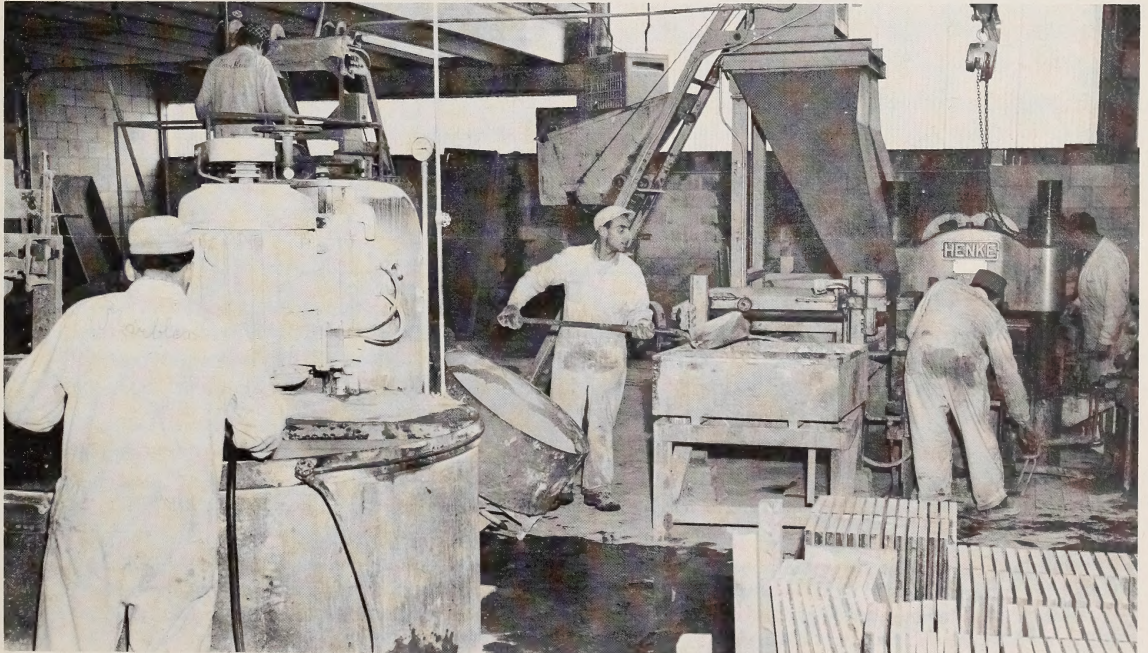
Sales of Marblux Corporation's products will be handled across Canada by company salesmen and a distributor organization.

Cost of the new Edmonton plant and equipment was in excess of \$500,000.



Marblux tiles were used in facing the company's \$500,000 plant at 14360-125 Ave., Edmonton. Patio tiles shown here were laid directly on the ground.

An automatic grinder which finishes the face of tiles is shown at left. At right is the Henke 500-ton hydraulic press which compresses the crushed stone and backfill mixture.



ALBERTA INDUSTRIAL OPPORTUNITIES

ELECTRICAL APPARATUS AND SUPPLIES

The population of the four western provinces is 4.7 million, or 27% of that of all Canada. In 1958 manufacturers' shipments in the area totalled \$3.7 billion, or 17% of that of all Canada.

In 1958 the Canadian electrical apparatus and supplies industry produced goods to a value of over \$1 billion. Production of firms in the western provinces in this industry was valued at \$37.3 million or less than 4% of the total. It can be assumed safely that consumption of electrical goods in the area lies in the 17% to 20% range or somewhere between \$170 million to \$200 million annually at factory prices. Many of the products could be manufactured economically in western Canada.

The following table shows estimated minimum size of market 1961—for a cross section only of the industry:

	Manufactured in Canada	Used in Western Canada @ 20% of total
A.C. motors 1/3 h.p. to 5 h.p.		
Single phase, induction		
Polyphase, induction	\$19,300,000	\$ 3,860,000
Distribution transformers up to 200 k.v.a.	14,851,965	3,000,000
Rigid conduit	9,104,096	1,800,000
Electrical switch gear and protective equipment ...	62,170,484	12,400,000
Dry Cell batteries	8,212,591	1,600,000
Electric lamps (bulbs)	12,618,350	2,500,000
Fluorescent electric lamps (bulbs)	5,684,156	1,100,000
Industrial control equipment	24,187,993	4,800,000
Refrigeration equipment	62,747,449	12,500,000
Electric lighting equipment	36,044,000	7,200,000
Wiring devices	12,908,670	2,600,000
Poleline hardware	12,303,000	2,400,000

Research organizations of the Department of Industry and Development will attempt to secure additional information on any of the items mentioned here on behalf of interested parties. Inquiries should be directed to Richard Martland, Director, Industrial Development Branch, Department of Industry and Development, Edmonton.

Technical Assistance Available

The Technical Information Service of the Research Council of Alberta has been established to assist industry solve their technical problems and to provide free of charge, latest technical and scientific information. In addition to handling specific inquiries, the Service has prepared a number of reports on various subjects and these are available at no cost from Technical Information Service, Research Council of Alberta, 87 Avenue and 114 Street, Edmonton, Alberta.

TOWN OF BASSANO

Location: Part of Section 17- and 18 -21-18-W4 in Census Division No. 2. The town is 88 miles southeast of Calgary on the Trans-Canada highway, and on the main line of the CPR.

Altitude: 2,600 feet.

Temperature: Mean summer, 60 degrees F; mean winter, 26 degrees F; mean annual, 40 degrees F.

Rainfall: Mean annual rainfall, 9.72 inches; mean annual snowfall, 38.5 inches; mean annual precipitation, 13.57 inches.

Geology: The Fox Hills formation forms the bedrock at Bassano. It is a variable series of brown, grey and green sandstones and sandy shales. The formation contains oyster beds and bits of fossilized wood. It is of Upper Cretaceous Age.

Soil: Bassano is in the brown soil zone with the surface horizon about five inches deep. Lime is generally found at 15 inches. Moisture is the principal limiting factor in crop production. Soils are relatively low in nitrogen and, under irrigation, respond to phosphorus fertilizers. Most of the area is suited to ranching. Where farmed, wheat is the principal crop grown. The long frost-free period makes this zone a desirable area for development of irrigation.

History: The town was named after a shareholder of the CPR, the Marquis de Bassano, when the railway reached the centre in 1884. Development was slow until after the turn of the century. In 1910 Bassano was incorporated as a town. Three years later an irrigation project to provide water was completed, and electricity service became available. Natural gas was discovered in the area in 1911. A hospital was erected in 1914, and expanded in 1919.

Living Conditions: Bassano lies between the Red Deer and Bow Rivers. An irrigation reservoir located three miles from the town provides opportunity for good fishing, boating and swimming. Winter sports activities include curling, skiing, skating or tobogganing. There are five churches in the community. Houses number in excess of 300 with average rent for a five room house being \$55 per month.

Administration: The town is governed by a council consisting of a mayor elected for a two-year term and six councillors, two elected each year for a three-year term. The secretary-treasurer carries out the policy set by the council.

Laws and Regulations: All new buildings, repairs to buildings and removals must be approved by council. Electrical and sanitary installations must comply with provincial regulations. The town is policed by its own constable.



BASSANO,
ALBERTA

Government Offices and Services: Federal—Post Office, RCMP detachment of one constable. Provincial — Liquor store, Treasury Branch agency, Alberta Government Telephones, Medicine Hat Health Unit. Municipal—Town office, secretary-treasurer, utility man and assistant, fire hall, town constable.

Fire Protection: A volunteer fire department of a chief and 18 firemen has at its disposal adequate equipment to provide efficient fire protection. Water is obtained from a 200,000 gallon elevated tower. There are 23 conveniently located hydrants. A new pumper is used for town fires and also for fighting fires within a five mile radius of the community.

Tax Structure: Assessment—land at 100 percent of fair value, \$172,860; improvements at 100% of fair value, \$824,190; power, \$18,000 for a total of \$1,015,050. Mill rate is 70 mills comprising 26 municipal, 40 school and 4 for hospital.

Areas: Area of town, 750 acres; streets and lanes, 170 acres; public parks and playgrounds, nine acres. There are 33 miles of roads, streets and lanes, five miles of sanitary sewers, eight miles of water mains, and one-tenth mile of storm sewer.

Water: Is obtained from the Bow River and stored in a 200,000-gallon elevated tower. There is also a 50,000-gallon elevated tower owned by the CPR. Domestic flat rate is \$5 per month including sewer while commercial rates vary between \$6 and \$30 per month.

Power: Three phase, 60-cycle power is supplied under a franchise by Calgary Power Ltd. Domestic rate is \$2.70 gross for the first 20 kwh, and 1½ cents per kwh for all over 20 kwh. A commercial rate includes a service charge of 40 cents per month for the first ½ kw connected load, and 10 cents per month for each additional ¼ kw connected load. Energy charge is 10 cents per kwh for the first 50 kwh per month per kw of installation. Next 150 kwh per month per kw of installation, 5 cents per kwh; and all over 200 kwh per month, 2¼ cents per kwh. Prompt payment discounts are available, as is a special power rate for motors, rectifiers, commercial heating apparatus, etc., in commercial establishments.

Natural Gas: General rate available to all customers—first two mcf or less used per month, \$2.50; all additional mcf used per month, 75 cents per mcf. Minimum charge is \$2.50. Accounts not paid on or before due date will be charged an additional four cents per mcf over the initial two mcf used. An optional rate is available on annual contract to all customers whose annual consumption is more than 552 mcf. Fixed charge is \$12.50 per month plus a commodity charge of 50 cents per mcf per month.

Fuel: L.P. gas with a heat value of 2521 b.t.u. per cubic foot at 60 degrees F is available in 100-pound cylinders at \$6.50 each, or 16 cents per gallon. Diesel fuel is available at 17.1 cents per gallon summer grade and 18.1 cents per gallon winter grade. Coal is also available.

Local Resources: Cereals, dairy products, honey, horses, cattle, sheep, hogs, poultry and eggs, gas, sand, gravel, straw, vegetables (beans, peas, corn and potatoes), fruit (crab apples, cherries, strawberries, Manitoba plums), grass seed.

Health Services: The Bassano Municipal Hospital contains 36 beds and six bassinets. It is staffed by a matron, seven graduate nurses and four nurses' aides. Rate for Canadian residents in public ward is \$1.60 per day; for non-residents, \$11.50 per day. There are also two practising physicians, one dentist, one veterinarian, and one drug store.

Professional and Skilled Personal Services: Accountants call weekly, one beauty parlor, two barber shops.

Transportation: Canadian Pacific Railway main transcontinental line, and branch lines to Moose Jaw via Empress and Drumheller. Greyhound bus services, and local truck cartage daily to and from Medicine Hat and Calgary.

Communication: Bassano Times (weekly), CP telegraphs, post office, nearest radio station is CJDV Drumheller.

Financial Facilities: Royal Bank of Canada, Provincial Treasury Branch Agency.

Hotels: Imperial, 28 rooms.

Motels: Upland Motel and Trailer Court, nine motel units and ten trailer units.

Churches: Presbyterian, Anglican, Roman Catholic, Evangelical Free Church, Seventh Day Adventist.

Lodges: Masons, Knights of Columbus, Eastern Star.

Service Clubs: Board of Trade, Kinsmen, Canadian Legion.

Societies and Associations: Home and School Association, Fish and Game Association, Red Cross, Agricultural Society.

Education: The town schools are part of the Newell County No. 4. Grades one to twelve are taught along with the following optional subjects: French, Art, Music, Commercial, Shop, Typing, Drama. There are approximately 150 pupils and a total of 12 teachers.

Cultural Activities: The school library is open to the public during school hours. A sketch club is active, and there is a five-piece orchestra.

Youth Activities: Boys—Scouts, 4-H clubs; Girls—C.G.I.T., Girl Guides, Brownies, 4-H clubs.

Sports Facilities: Open air skating and hockey rink, three-sheet natural ice covered curling rink, swimming pool, playgrounds, baseball diamond. Activities include baseball, hockey, softball, curling, badminton, swimming, boating.

Fairs: Bassano Stampede and Rodeo, July 1; track meets.

Historical Sites: A cairn 14 miles west of Bassano marks the spot of signing in 1877 of Treaty Seven between the Blackfoot Indian Tribe and the government.

Co-operatives: Alberta Wheat Pool, Eastern Irrigation District, Bow Valley Feeder's Association.

Sites: Industrial and residential lots can be purchased at reasonable prices from the town.

Industrial Development. Bassano is the centre of an area devoted to varied types of farming and a mixed pattern of dry-land and irrigation farming is found throughout. Farms are either quite large, or relatively small, and more than 75 percent are electrified.

Trading Area: North, 28 miles; west, 22 miles; south, eight miles; east 14 miles.

Population: Trading area population, 3,500. Town population, 800.

For further information about Bassano write

Secretary-Treasurer,

Town of Bassano,

Bassano, Alberta

or

R. Martland,

Director of Industrial Development,
Department of Industry and Development,
502 Administration Building,
Edmonton, Alberta